

III. Amendments to the Drawings:

Replacement sheets 1 and 2 of the drawings, which include changes to Figures 1, 3 and 4, are attached.

Specifically, Figure 1 was amended to illustrate the left and right sensors 11 and 12 and sensor unit 7 as being located in the left and right hand sides 101 and 102 and the central tunnel 103 of the vehicle, respectively. Also, paragraph [0042] was amended to recite that the left and right hand sides 101 and 102 are schematically illustrated and paragraph [0044] was amended to recite that the central tunnel 103 is schematically illustrated. These amendments were in response to the objections that the location of the sensors according to claims 2 and 5 must be shown. Accordingly, Applicants believe these amendments have cured the respective objections.

Figure 3 was amended by adding reference numbers 2 and 5a, and Figure 4 was amended by adding reference numbers 2, 4 and 5a. These amendments were in response to the objections that Figure 3 did not include reference signs 2 and 5a and Figure 4 did not include reference signs 2, 4 and 5a. Accordingly, Applicants believe these amendments have cured the respective objections.

IV. Remarks

Claims 1-21 were pending in this application. Claims 1-21 were rejected, and claim 21 was objected to. The present amendment amends claims 1 and 21 to more particularly point out and clarify Applicants' invention. After this amendment, claims 1-21 will be pending.

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

Claim Objections

Claim 21 was amended to recite that the sensor unit is provided on a single microchip. This was in response to an objection that "is" should be inserted between "unit" and "provided" in claim 21. Accordingly, Applicants believe that this amendment has cured the respective objection.

Rejections under 35 U.S.C. § 103

Claims 1, 2, 5-9 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,977,653 issued to Schmid et al. ("Schmid") in view of GB Patent No. 2,370,671 issued to Bauch et al. ("Bauch"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 1, 2, 5-9 and 15 are traversed.

Applicants have amended claim 1 to recite that the vehicle safety arrangement comprises a control unit. The control unit comprises no sensor

response to acceleration. Support for this amendment may be found in Applicants' application at paragraph [0009].

Schmid discloses a detection configuration 20 in communication with a central configuration 10 to be used for side-impact detection and for firing a restraining device of a vehicle. The impact detection configuration 20 includes an acceleration sensor 5 and is disposed in a side part of the vehicle. The detection configuration 20 also includes a controller 3 which evaluates the acceleration signal provided by the sensor 5 and supplies the signal to the central configuration 10. The central configuration 10 includes both a second control unit 2 and an acceleration sensor 6 that provides an acceleration signal to the second control unit 2. The central configuration 10 evaluates the signals from the detection configuration 20 and the acceleration sensor 6 to determine whether or not firing element 100 is to be fired. *Schmid* at column 7, lines 6-40. Notably, both the impact configuration 20 and the central configuration 10 include an acceleration sensor 5 and 6.

In claim 1 of the present invention, the recited construction is such that the control unit comprises no sensor response to acceleration. In that the central configuration 10 includes an accelerometer sensor 6, Schmid fails to disclose the specific limitations of the present claim. Moreover, Bauch fails to disclose this limitation.

Bauch discloses a side impact sensing system 10 that has a first sensor 18 mounted on the door 36 of the vehicle 12 and a second sensor 26 mounted in the passenger compartment 52. The first and second sensors provide

signals to a controller 14 which compares the signals to determine whether to inflate an airbag 28. *Bauch* at Abstract. *Bauch* does not disclose that the controller 14 comprises no sensor responsive to acceleration.

In that the combination of the references fail to disclose or suggest the limitations noted as being absent, it would be concluded that the combination of Schmid and *Bauch* cannot render claim 1, and the claims dependent thereon, as obvious. The rejection under § 103 is therefore improper and should be withdrawn.

Claims 3 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmid in view *Bauch* and further in view UK Patent No. GB 2,292,126 issued to Burton et al. (“*Burton*”). Applicants respectfully submit that the rejections of claims 3 and 4 are traversed.

Since claims 3 and 4 depend on claim 1 and since *Burton* fails to disclose a control unit comprising no sensor response to acceleration, the combination of Schmid, *Bauch* and *Burton* cannot render the claims of the present invention as obvious. The objection under §103(a) is therefore improper and should be withdrawn.

Claim 10 was rejected as being unpatentable over Schmid in view of *Bauch* and further in view of U.S. Patent No. 6,113,138 issued to Hermann et al (“*Hermann*”). Applicants respectfully submit that the rejection of claim 10 is traversed.

Since claim 10 depends on claim 1 and since *Hermann* fails to disclose a control unit comprising no sensor response to acceleration, the combination

of Schmid, Bauch and Hermann cannot render the claims of the present invention as obvious. The rejection under §103(a) is therefore improper and should be withdrawn.

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view Bauch and further in view of U.S. Patent No. 6,459,366 issued to Foo et al (“Foo”). Applicants respectfully submit that the rejection of claim 11 is traversed.

Since claim 11 depends on claim 1 and since Foo fails to disclose a control unit comprising no sensor response to acceleration, the combination of Schmid, Bauch and Foo cannot render the claims of the present invention as obvious. The rejection under §103(a) is therefore improper and should be withdrawn.

Claims 12-14, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable Schmid in view of Bauch and further in view of U.S. Publication No. 2002/0084636 issued to Lewallen et al. (“Lewallen”). Applicants respectfully submit that the rejection of claims 12-14 and 16 are traversed.

Since claims 12-14 and 16 depend on claim 1 and since Lewallen fails to disclose a control unit comprising no sensor response to acceleration, the combination of Schmid, Bauch and Lewallen cannot render the claims of the present invention as obvious. The rejection under §103(a) is therefore improper and should be withdrawn.

Claims 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view Bauch and further in view of U.S. Patent

No. 6,522,992 issued to McCall et al. ("McCall"). Applicants respectfully submit that the rejections of claims 17-20 are traversed.

McCall discloses a core inertial measurement unit (IMU), including acceleration sensors, to be employed with a Micro Electronic Mechanical System (MEMS) for guidance and navigation. *McCall* at Abstract. The Examiner posits that McCall teaches a core inertial measurement unit (IMU) which is miniaturized and light weight and that it would have been obvious to one of ordinary skill to include the vehicle safety arrangement taught by Schmid and Bauch and to miniaturize the corresponding sensor unit relative to the control unit as disclosed by McCall. Office Action at page 13. This is however not the case. McCall discloses a core IMU which is miniaturized (Length/Width/Height) and light weight. *McCall* at Col. 3, lines 14-24. However, McCall fails to disclose dimensions for the IMU or define the term "miniaturized". Accordingly, the Examiner is speculating that McCall's IMU is relatively smaller than the control unit recited in claim 1 of the present invention. Moreover, McCall discloses that the IMU comprises a first circuit board 2, a second circuit board 4, a third circuit board 7, and a control circuit board 9 arranged inside a metal cubic case 1. *Id.* at Col. 18, lines 50-55 and Figures 17 and 18. Thus, the ICU contains the control circuit board 9, which functions as a control unit, together with other circuit boards and accordingly, the ICU must be larger than the control circuit board 9. If the ICU was relatively smaller than the control circuit board 9, the ICU would have to be substantially reconstructed from that disclosed by McCall by removing the

control circuit board 9 from the ICU. Finally, the ICU notably contains sensors for detecting acceleration together with the control circuit board 9.

Since claims 17-20 depend on claim 1 and since McCall fails to disclose a control unit comprising no sensor response to acceleration, the combination of Schmid, Bauch and McCall cannot render the claims of the present invention as obvious. Moreover, McCall fails to disclose the limitation recited in claim 17. Specifically, McCall does not disclose a sensor unit as having a smaller volume than that of the control unit a control unit. The rejection under §103(a) is therefore improper and should be withdrawn.

Accordingly, Applicants believe that claim 1 and its dependent claims 2-21 are in a condition for allowance.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is respectfully requested.

Respectfully submitted,

Dated: _____

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